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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PHAN, RAYMOND NGAN

ART UNIT	PAPER NUMBER
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2111

DATE MAILED: 01/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/751,839

Applicant(s)

WU ET AL.

Examiner

Raymond Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Part III DETAILED ACTION

Notice to Applicant(s)

1. This action is responsive to the following communications: amendment filed on October 31, 2003
2. This application has been examined. Claims 1-31 are pending.
3. The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2111.

Specification

4. The title of the invention is accepted.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 6-8, 10-14, 17-19, 28-30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Papa et al. (US No. 6,418,492) in view of Najemy (US No 5,809,256).

In regard to claims 1, 7, 11, Papa et al. disclose a network device 92A including slots for a plurality of hot-swappable physical interface cards, comprising an interface designed to receive the interface cards (i.e. NIC), each

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interface card designed to receive information using at least one of the plurality of network interface standards (see figure 1, col. 5, lines 22-45); a plurality of power supply lines for supply power from the network device to the interface card through the interface (see figure 1, col. 5, lines 22-45); an on/off power control circuit (i.e. quick switch) connected to the plurality of power supply lines to control power supplied to the power supply lines (see figure 1, col. 5, lines 22-45). But Papa et al. do not specifically disclose a controller connected to the on/off power control circuit, in response to detecting the presence of the interface card in the interface instructing the on/off power control circuit to turn on the plurality of power supply lines and to ramp the power supplied to each one of the turned on power supply lines. However Najemy discloses the controller connected to the on/off power control circuit, in response to detecting the presence of the interface card in the interface instructing the on/off power control circuit to turn on the plurality of power supply lines and to ramp the power supplied to each one of the turned on power supply lines (see col. 5, line 1 through col. 6, line 23). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Najemy within the system of Papa et al. because it would protect the card from power surge or instability.

In regard to claims 2, 12, 18, Papa et al. teach the claimed subject matter as discussed above except the teaching of wherein the controller detects the presence of interface card in the interface by detecting an electrical connection with a predetermined pin the in the interface card. However Najemy discloses wherein the controller detects the presence of card in the interface by detecting an electrical connection with a predetermined pin the in the card (see col. 5, line 1 through col. 6, line 23). Therefore, it would have been obvious to a person of an ordinary skill

in the art at the time the invention was made to have combined the teachings of Najemy within the system of Papa et al. because it would protect the card from power surge or instability during insertion or replacement.

In regard to claims 3, 13, 19, Najemy discloses wherein the predetermined pin in the card is designed to be last pin to come into contact with the interface (see col. 5, line 1 through col. 6, line 23). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Najemy within the system of Papa et al. because it would protect the card from power surge or instability during insertion or replacement.

In regard to claim 6, Papa et al. disclose the power control circuit connected to the controller and to each of the plurality of power supply lines for monitoring signaling the controller when the power supplied to each of the power supply lines stabilized (see col. 23, line 65 through col. 24, line 15).

In regard to claim 8, Najemy discloses the voltages levels in the power supply lines, however one skilled in the art would have understood that they can choose to implement the specific voltage levels to the power supply lines to satisfy the installed cards requirements (see col. 5, line 1 through col. 6, line 23). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Najemy within the system of Papa et al. because it would protect the card from power surge or instability during insertion or replacement.

In regard to claim 10, even though the teachings of Papa et al or Najemy do not specifically disclose network device as the router, however one skilled in the

art would have understood that they can choose to have the device to facilitate the network card.

In regard to claim 14, Najemy discloses the power control circuit connected to the controller and to each of the plurality of power supply lines for monitoring signaling the controller when the power supplied to each of the power supply lines stabilized (see col. 5, line 1 through col. 6, line 23).

In regard to claim 17, Papa et al. disclose a network device 92A including slots for a plurality of hot-swappable physical interface cards, comprising an interface designed to receive the interface cards (i.e. NIC), each interface card designed to receive information using at least one of the plurality of network interface standards (see figure 1, col. 5, lines 22-45); a plurality of power supply lines for supply power from the network device to the interface card through the interface (see figure 1, col. 5, lines 22-45); an on/off power control circuit (i.e. quick switch) connected to the plurality of power supply lines to control power supplied to the power supply lines (see figure 1, col. 5, lines 22-45); clearing the data bus (i.e. reset line) connected between the controller and the physical interface (see col. 7, lines 51-60); blocking signal caused by removal of the interface card on the control lines between the physical interface and the controller (see col. 5, lines 23-45). But Papa et al. do not specifically disclose a controller connected to the on/off power control circuit, in response to detecting the presence of the interface card in the interface instructing the on/off power control circuit to turn on the plurality of power supply lines and to ramp the power supplied to each one of the turned on power supply lines. However Najemy discloses the controller connected to the on/off power control circuit, in response to detecting the presence of the interface card in the interface instructing the on/off power control circuit to turn on

the plurality of power supply lines and to ramp the power supplied to each one of the turned on power supply lines (see col. 5, line 1 through col. 6, line 23).

Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Najemy within the system of Papa et al. because it would protect the card from power surge or instability.

In regard to claims 28-30, even though the teachings of Najemy does not specifically disclose wherein the power supplies to each of one of the turned on power supply lines is ramped over a time period about 5-20ms, however one skilled in the art would have understood that they can choose to set or design the time interval to ramp up the power to avoid the damage of the inserted or removal cards.

7. Claims 4-5, 9, 15-16, 20-27, 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Papa et al. in view of Najemy further in view of Wallach et al. (US No. 6,170,028).

In regard to claims 4, 15, Papa et al. teach the claimed subject matter as discussed above except the teaching of receiving the packets of information from the interface card over the high speed bus. However Wallach et al. disclose the network adapter (i.e. NIC) being able to receive the packet of information over the high speed bus (see col. 9, lines 27-45). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Wallach et al. within the system of Papa et al. and Najemy because it would reduce the downtime of servers in network environment.

In regard to claim 5, Wallach et al. disclose the memory connected to the packet I/O manager for storing packet received by the packet I/O manager (see col.

9, lines 12-45). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Wallach et al. within the system of Papa et al. and Najemy because it would reduce the downtime of servers in network environment.

In regard to claims 9, 16, 20, 24, Wallach et al. disclose the interface card received information from at least ATM or Ethernet connection (see col. 6, lines 56-67). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Wallach et al. within the system of Papa et al. and Najemy because it would reduce the downtime of servers in network environment.

In regard to claims 21, Papa et al. disclose a network device 92A including slots for a plurality of hot-swappable physical interface cards, comprising an interface designed to receive the interface cards (i.e. NIC), each interface card designed to receive information using at least one of the plurality of network interface standards (see figure 1, col. 5, lines 22-45); a plurality of power supply lines for supply power from the network device to the interface card through the interface (see figure 1, col. 5, lines 22-45); an on/off power control circuit (i.e. quick switch) connected to the plurality of power supply lines to control power supplied to the power supply lines (see figure 1, col. 5, lines 22-45); and a controller connected to the on/off power control circuit, in response to detecting the presence of the interface card in the interface instructing the on/off power control circuit to turn on the plurality of power supply lines and to ramp the power supplied to each one of the turned on power supply lines (see col. 6, lines 4-65). But Papa et al. do not specifically disclose the high speed bus for communicating packet of information with the network device. However Wallach et al. disclose

the network adapter (i.e. NIC) being able to receive the packet of information over the high speed bus (see col. 9, lines 27-45). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Wallach et al. within the system of Papa et al. and Najemy because it would reduce the downtime of servers in network environment.

In regard to claim 22, Najemy discloses wherein the predetermined pin in the card is designed to be last pin to come into contact with the interface (see col. 5, line 1 through col. 6, line 23). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Najemy within the system of Papa et al. because it would protect the card from power surge or instability during insertion or replacement.

In regard to claims 23, 26, Najemy discloses wherein the predetermined pin in the card is designed to be last pin to come into contact with the interface (see col. 5, line 1 through col. 6, line 23). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Najemy within the system of Papa et al. because it would protect the card from power surge or instability during insertion or replacement.

In regard to claim 25, Najemy discloses the voltages levels in the power supply lines, however one skilled in the art would have understood that they can choose to implement the specific voltage levels to the power supply lines to satisfy the installed cards requirements (see col. 5, line 1 through col. 6, line 23). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Najemy within

the system of Papa et al. because it would protect the card from power surge or instability during insertion or replacement.

In regard to claim 27, even though the teachings of Papa et al or Najemy or Wallach et al. do not specifically disclose network device as the router, however one skilled in the art would have understood that they can choose to have the device to facilitate the network card.

In regard to claim 31, even though the teachings of Najemy does not specifically disclose wherein the power supplies to each of one of the turned on power supply lines is ramped over a time period about 5-20ms, however one skilled in the art would have understood that they can choose to set or design the time interval to ramp up the power to avoid the damage of the inserted or removal cards.

Response to Amendment

8. Applicant's arguments with respect to claims 1-27 have been considered but claims 1-27 are deemed to be moot in view of the new grounds of rejection.

Applicant's arguments, see pages 10-15, filed October 31, 2003, with respect to the rejection(s) of claim(s) 1-27 under 35 U.S.C. § 102 (e) and 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Najemy.

Conclusion

9. All claims are rejected.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Raymond Phan, whose telephone number is (703) 306-2756. The examiner can normally be reached on Monday-Friday from 6:30AM- 4:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's Primary, Paul Myers can be reached on (703) 305-9656 or via e-mail addressed to paul.myers@uspto.gov. The fax phone number for this Group is (703) 746-7239.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [raymond.phan@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.



Raymond Phan

1/9/04